

## **PROPOSED TECHNICAL PURCHASE DESCRIPTION (TPD) FOR A PRE-SOAK CLEANER**

### **1. Scope**

This technical description (TPD) covers Navy shipboard requirements for liquid or powder pre-soak cleaner (without sanitizing properties). This cleaner should contain enzymes that break down protein soils on stainless steel and silver flatware.

### **2. Unit of Issue**

1. Pack size: 2/8 lb containers per case.
2. One (1) gallon container.
3. Thirty (30) Two (2) pound packs per case.

(Suggested units of issue. Other units of issue will also be considered and not limited to the units listed below.)

### **3. Requirements**

#### **3.1 Material**

The composition of the presoak cleaner shall be optional with the manufacturer, but shall meet the requirements of this TPD.

#### **3.2 Finished Product**

The presoak cleaner shall be a liquid or powder with the following characteristics:

##### **3.2.1 pH**

A 1% solution of the pre-soak cleaner shall have a pH between 7.5-11.5 when tested in accordance with ASTM E70.

##### **3.2.2 Cleaning Efficiency**

When prepared as directed on the label, the pre-soak cleaner solution shall have a cleaning efficiency comparison index of not less than 0.8, when tested as specified in federal Test Method Standard No 536, Test Method 6701 – Cleaning Efficiency. (Other commercially acceptable test methods may be considered as an alternate.)

##### **3.2.3 Aquatic Toxicity**

The product shall not be toxic to aquatic life as measured by test methods found in 40 CFR Part 797, Subpart B, and determined by meeting the following three criteria for acute (Daphnia or fish), acute (algae), and chronic (Daphnia) effects:

Acute: EC50 Daphnia (48 hr.) >10mg/L; or LC50 fish (96hr.) > 10 mg/L.

Acute: EC50 algae (96 hrs) > 10 mg/L

Chronic: EC50 Daphnia (21-day or > 10 mg/L 15 day minimum).

### **3.2.4 Biodegradability**

The pre-soak cleaner shall be water soluble in fresh or salt water, dilution biodegradable, and readily decomposed by naturally occurring microorganisms. Biodegradability shall be a minimum of 50% in 23 days when tested in accordance with EPA/OPPTS Test Guidelines 835.3110 or 835.3120. (Other commercially acceptable test methods may be considered as an alternate. If historic documentation for the biodegradability test is available for the individual components of the product formulation, this information will also be accepted in lieu of the specified cleaning product.)

## **3.3 Prohibited Materials**

### **3.3.1 Carcinogens and Toxins**

The materials used in the presoak cleaner shall not contain any known or suspected human carcinogens in concentrations equal to or greater than 0.1% (by weight) as defined in: Code of Federal Regulations 29 CFR 1910.1000 Series, Occupational Safety and Health Administration (OSHA) Subpart Z Regulated Carcinogens/Toxic and Hazardous Substance List (latest edition); International Agency for Research on Cancer (IARC) Groups 1, 2A, and 2B (latest edition); and the latest annual report of the National Toxicology Program's (NTP) of Known to be Human Carcinogens, and Reasonably Anticipated to be Human Carcinogens.

### **3.3.2 Reproductive Hazards**

The materials used in the presoak cleaner shall not contain the following occupational reproductive hazardous chemicals if used in concentrations equal to or greater than 0.1 percent (by weight): acetohydroxamic acid, aminopterin, arsenic, benomyl, benzene, bromoxynil, cadmium, carbon disulfide, carbon monoxide, chlordecone, cyanazine, cycloheximide, cyhexatin, dinocap, dinoseb, 1,2-dibromo-3-chloropropane, m-dinitrobenzene, o-dinitrobenzene, p-dinitrobenzene, epichlorohydrin, ethylene glycol monoethyl ether, ethylene glycol monoethyl ether acetate, ethylene glycol monomethyl ether, ethylene monomethyl ether acetate, ethylene oxide, hexachlorobenzene, hydroxurea, lead, mercury and mercury compounds, methyl bromide, methyl mercury, nickel carbonyl, polybrominated biphenyls, polychlorinated biphenyls, 2,3,7,8-tetrachloro-dibenzo-para-dioxin, toluene, and warfarin and any other chemical species listed in OPNAVINST 5100.23, Chapter 29, Appendix 29-B. The most current version of the instruction can be obtained from the internet website: <http://www.navosh.net>.

### **3.3.3 Phosphate**

Elemental Phosphorous in the powder pre-soak shall not exceed 0.5% by weight when diluted in accordance with the manufacturer's label.

## **3.4 Hazardous Waste**

The material used in the pre-soak cleaner shall not be classified as hazardous waste in accordance with 40CFR 261.

## **3.5 Material Safety Data Sheets (MSDSs)**

The contracting activity shall be provided a material safety data sheet with each contract bid/proposal or prior to contract award. The MSDS shall be provided in accordance with the requirements of FED-STD-313 and 29 CFR 1910.1200, Hazardous Communication Standard. The MSDS shall be included with each shipment of the material covered by this TPD. The MSDS must be current version for the product.

### **3.6 Shelf Life and Maximum Age on Delivery**

The product shall have a minimum shelf life of 36 months and be no greater than 5 months from the manufacturing date when received by the supply system.

### **3.7 Containment and Labeling**

The pre-soak cleaner shall be furnished in new, non-returnable, commercial type, factory-sealed containers. All containers shall be labeled with labeling impervious to the contents of the container. Labeling can be accomplished by printing directly on the container or by attaching a paper label or tight-fitting sleeve-type on a plastic container designed to receive and hold sleeve-type labels. Labels shall not be easily removed from the container. Labels shall give adequate use instructions and toxicity warning, skin irritants, if applicable. Labels shall meet all federal regulation requirements of the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard in 29 CFR 1910.200 and the Federal Hazardous Substances Act.

Each container shall be durable and legibly marked with directions for use and the following precautions:

Caution: May be Harmful if Swallowed. Avoid contact with eyes. If concentrated liquid is splashed in eyes, flush thoroughly with water and seek medical attention. If swallowed, drink large amounts of water, induce vomiting and seek medical attention.

## **4. Regulatory Requirements**

### **4.1 Environmental Considerations**

The product delivered under this TPD shall be in accordance with the environmental requirements of 40 CFR.

### **4.2 Recycling**

The contractor is encouraged to use recovered materials in accordance with Public Law 94-580 to the maximum extent practicable.

### **4.3 Volatile Organic Compounds (VOCs)**

VOC levels of the product must be stated as a % of VOCs by weight when prepared in the dilution ratio as directed on the manufacturer's label and shall not exceed 10% in accordance with 40 CFR parts 9 and 59.

### **4.4 EPA Compliance**

Product must meet applicable federal specification as specified in the Food Quality Management Act. In order to be safely used on food processing equipment, utensils, and other food contact articles, the product shall be used only as specified by the manufacturer..

## **5. Quality Assurance Provisions**

### **5.1 Contractor Certification**

The contractor shall certify and maintain substantiating evidence that the product offered meets the salient characteristics of this TPD and that the product conforms to the producer's own drawings, specifications, standards, and quality assurance practices and is the same product offered for sale in the commercial market place. The Government reserves the right to require proof of such conformance prior to first delivery, and thereafter as may be otherwise provided for under the provisions of the contract.

### **5.2 Market Acceptability**

The following market acceptability criteria are necessary to document the quality of the product to be provided under this TPD:

1. The company furnishing the product must have been producing a product meeting the requirements of this technical purchase description for at least 6 months.
2. The Government reserves the right to require proof of such conformance.

## **6. Packaging**

### **6.1 Preparation For Delivery**

The item(s) shall be packaged and packed in accordance with the latest revision of ASTM D 3951, Standard Practice for Commercial Packaging unless specified in the contract or purchase.

## **7. Source of Documents**

7.1 Copies of the Code of Federal Regulation (CFR) and Federal Acquisition Regulation (CFR) may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington DC, 0402.

Website: <http://www.access.gpo.gov/nara/cf/cfr/cfc-table-search.html>

7.2 Copies of Federal Standards and Specifications may be obtained from the Standardization Document Order Desk, 700 Robbins Avenue. Website: <http://www.dodssp.daps.mil>.

7.3 Copies of ASTM test methods may be obtained from the American Society for Testing and Materials, 100 Barr harbor Drive, West Conshohocken, PA 19428-2959. Website: [www.astm.org](http://www.astm.org).

7.4 Copies of the most recent Annual Report on Carcinogens may be obtained from the U.S. Department of Health and Human Services, Public Health Service, National Toxicology Program, P.O. Box 12233, Research Triangle Park, NC 27709. Website: HYPERLINK <http://ntp-server.niehs.nih.gov/NewHomeRoc/AboutRoC.html>

7.5 Copies of all IARC publications are available directly from IARC PRESS, 150 Cours Albert Thomas, F-69372 Lyon cedex 08, France (Fax: +33 472 73 83 02; E-mail [press@iarc.fr](mailto:press@iarc.fr))

7.6 Copies of Public Law 95-580 "Resource Conservation & Recovery Act" (RCA) may be obtained from Superintendent of Documents, U. S. Government Printing Office, Washington, DC 20402.

7.7 Copies of EPA/OPPTS test methods may be obtained directly from EPA Website: [www.epa.gov/opptsfrs/home/opptism.htm](http://www.epa.gov/opptsfrs/home/opptism.htm).

7.8 Copies of Federal Test Method Standards may be obtained from the General Services Administration, Specification sales, Building 197, Washington Navy Yard, Washington, DC 20407.